

**Automatic Teller Machine Service and Customer Satisfaction in the Banking Sector:
Case of Nakivubo Stanbic Bank Branch**

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2014-M102-20008



Uganda Martyrs University, Nkozi

October 2016

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**A Postgraduate Dissertation Presented to Faculty of Business Administration and Management in Partial
Fulfillment of the Requirement for the Award of the Degree Master of Business Administration and
Management**

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DEDICATION

This study is dedicated to my adored parents, siblings, colleagues and friends for their love, patience and encouragement especially during the period of conducting the research for this dissertation. Their enduring words of comfort will not go unappreciated.

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ABSTRACT

The study assessed the influence of ATM services on customer satisfaction in Stanbic Bank Uganda Limited (SBUL). It focused on the role of ATM operation, ATM accessibility, ATM reliability and ATM service security on customer satisfaction at Stanbic Bank Uganda Limited (SBUL). A cross sectional design was applied to collect and present data collected from 86 respondents. Pearson Correlation matrix was applied to generate the results of the study objectives. The study showed distinctive results for the relationship between ATM service and customer satisfaction. The findings showed that ATM operation, ATM accessibility, ATM reliability and ATM service security were significantly related to customer satisfaction. The findings indicated that ATM service quality is not the only factor that could lead to customer satisfaction in the financial sector. In conclusion, all the findings on the relationships between ATM operation, ATM accessibility, ATM reliability and ATM service security revealed significant effect on customer satisfaction. The findings on the regression analysis of 39.1% confirmed that ATM service was a major predictor of customer satisfaction in Stanbic Bank. The study recommends therefore that, management of Stanbic Bank offers specialized training to customers in the area of ATM service so as to foster reliability, accessibility as well as operation. The study recommends that in order to satisfy customers, Stanbic bank needs to deliver ATM services in an easier to use, accessible, reliable and secure manner. Likewise, to provide total satisfaction to customers, the management of the bank needs to carry out customer satisfaction surveys so as to assess whether its meeting customer expectations as desired by the customers of the bank.

CHAPTER ONE

GENERAL INTRODUCTION

1.1 Introduction

According to Marous (2013), gone are the days when a customer did all of their business in the bank branches. Today, most customers use multiple channels to research products, open, use and manage their accounts, resolve issues and receive notifications. Today's banking customer can interact with their financial institution through more channels than ever and the channels selected can have a significant impact on bank revenues as well as customer satisfaction. The key for banks is to determine the optimal channel mix for each customer that will maximize revenue (or reduce costs) without significantly reducing customer satisfaction or engagement. These channels includes the E-Banking/Internet banking, mobile banking, Automated Teller Machines (ATM), self-service kiosks among others (Stanbic Bank Annual report 2014).

1.2 Background of the Study

The use of computer technology has become a necessity in the banking industry over the years. Even in developing countries like Uganda, banks have on a large extent adopted the use of computerized equipments to enhance quick and efficient services such as local and international money transfers, cheque verification, payment system, electronic cheque clearing system, the implementation of the Real Time Gross Transfer system, which is called the Uganda National Inter-bank settlement (system) among others (Belch, 1993). In a continuous ploy to change the banking perception and service quality, most commercial banks have come up with avenues to correct these defects and offer quality services to the customers and

therefore customer satisfaction. Commercial banks in Uganda have embraced technological innovations and use of modern gadgets, with Automated Teller Machines (ATMS) as the most commonly used technology by the clients (Stanbic Bank Annual Report, 2014).

An Automated Teller Machine (ATM) is a computerized telecommunications device that provides the customers of a financial institution with access to financial transactions in a public space without the need for a human clerk or bank Teller. On most modern ATMs, the customer is identified by inserting a plastic ATM card with a magnetic stripe or a plastic smart card with a chip, which contains a unique card number and some security information. Security is provided by a customer entering a personal identification number (PIN) (Kawuma, 2005). Using an ATM, customers can access their bank accounts in order to make cash withdrawals, funds transfer, cash deposits, payment of utility and credit card bills, cheque deposits and book requests, access to mini statements and other financial enquiries. Researchers have stated that users' satisfaction is an essential determinant of success of the technology-based delivery channels (Tong, 2009; Wu and Wang, 2007).

Stanbic Bank Uganda (SBU) Ltd is a subsidiary of Stanbic Africa holding which is in turn owned by Standard Bank Group Limited. In 2002, the SBU Ltd acquired Uganda Commercial Bank Limited (UCBL). The bank is one of the largest commercial banks in the country by assets, with an estimated asset valuation of over US\$1.26 billion (UGX 3.5 trillion), accounting for approximately 19% of the total bank assets in Uganda, as of December 2014 (Stanbic Bank Annual Report, 2014). With all these benchmarks, the bank still faces problems of customer dissatisfaction, poor service delivery and stiff competition from Standard Chartered Bank, Centenary Bank and others. Despite the introduction of automation to avoid mistakes of

manual systems, the relationship between the bank and its customers has been affected. Several problems associated with bank operations have been experienced. These include: malfunctioning of machines, some of the ATMs are in inconveniencing locations with no privacy, some people do not know how to use the machines, leading to their break down and people end up losing their money (Fawcett, 1992).

1.3 Statement of the Problem

The Ugandan banking sector has been criticized for the provision of substandard services to the public as a result of putting ahead their interests to those of customers (BOU, 2012). Stanbic bank as well as other commercial banks has been prone to customer dissatisfaction. In due course this has had a negative effect on the performance of the bank (SBUL Annual Performance Report, 2013). This is supported by the KPMG report (2013) which showed that a continuous decline in the service rating of the bank ranking it -12 percent to other commercial banks. The decline in service quality at SBUL has driven many customers into seeking better service quality in other banks which has affected the bank's performance (SBUL Annual Report, 2013). The BOU Customer Satisfaction Report (2012) revealed that the service delivery through bank's ATMs was hampered by non-functional ATMs, inadequate cash, insecurity, difficulty in the operation of the machines, long queues in banking halls among other things. In a bid to address the above flaws, Stanbic Bank has continuously invested in Automated Teller Machines with 193 networked ATMs as a way of controlling costs, meeting the convenience, attracting new customers and expectations of their existing customers and digitalization among other strategic goals. All this would enable many customers of the bank to achieve satisfaction with the services rendered by Stanbic bank (SBUL Annual Performance

Report, 2014). Despite the fact that Stanbic Bank has continued to invest in ATMs, complaints of customer satisfaction have persisted which makes one wonder whether use of ATM gives more satisfaction to the bank than customers; hence the reason as to why the researcher set out to establish the effect of ATM service on customer satisfaction in Stanbic Bank Uganda Limited (SBUL).

1.4 Objectives of the study

1.4.1 Major Objective

The study assessed the influence of ATM services on customer satisfaction in Stanbic Bank Uganda Limited (SBUL).

1.4.2 Specific Objectives

The study was guided by the following specific objectives;

- i) To examine the influence of ATM operations on customer satisfaction in Stanbic Bank Uganda Limited.
- ii) To establish the effect of ATM accessibility on customer satisfaction in Stanbic Bank Uganda Limited.
- iii) To examine the contribution of ATM reliability on customer satisfaction in Stanbic Bank Uganda Limited.
- iv) To assess the effect of ATM service security on customer satisfaction in Stanbic Bank Uganda Limited.

1.4.3 Research Questions

- i) What is the influence of ATM operations on customer satisfaction in Stanbic Bank Uganda Limited?
- ii) What is the effect of ATM accessibility on customer satisfaction in Stanbic Bank Uganda Limited?
- iii) What is the contribution of ATM reliability on customer satisfaction in Stanbic Bank Uganda Limited?
- iv) What is the effect of ATM service security on customer satisfaction in Stanbic Bank Uganda Limited?

1.4.4 Hypotheses of the Study

- H1: ATM services operations do not influence customer satisfaction.
- H2: ATM accessibility does not affect customer satisfaction.
- H3: The reliability of ATMs does not influence customer satisfaction.
- H4: Service security of ATMs does not affect customer satisfaction.

1.5 Scope of Study

Scope of the study was categorized as geographical, content as well as time scopes.

1.5.1 Content Scope

The study focused on establishing the effect of ATM services on customer satisfaction. ATM services were the independent variables in this study and were examined in terms of ATM operation, accessibility of ATM, reliability of ATM and ATM service security. On the other hand, customer satisfaction was the dependent variable that was examined that included loyalty, repeat purchases and word of mouth in this study.

1.5.2 Geographical Scope

The study was carried out in Kampala District. The area was selected because of the presence of many automated teller machines operated by Stanbic bank. The study covered the area of Nakivubo branch which is gifted with two (2) Automated Machines; with (one) 1 being an intelligent machine (Touch screen/Instant deposits). This area was chosen because of its high density of clientele at the branch that consists of mostly business men/women, students, the corporate class and also the number of transactions the ATMs handles has propelled a study in this area.

1.5.3 Time Scope

The study covered the period from 2009 to 2015 during which the bank continued to experience a decline customer satisfaction due to declines in customer loyalty, decline in repeat purchases and negative word of mouth (SBUL Annual Report, 2013) despite management's efforts to offer ATM services.

1.6 Significance of the Study

- i) The findings of the study may provide a descriptive analysis on the relevance of ATM service in Ugandan commercial banks and other financial institutions.
- ii) It is hoped that the findings of the study may guide policy makers such as the Bank of Uganda on the prominent issues required to improve customer satisfaction in the financial sector where challenges of ATM services are still being faced.
- iii) It is hoped that the findings of the study may guide future research in commercial banks on ATM service for better customer satisfaction. The study may also contribute and

also added useful information to that which already exists in regard to determinants of customer satisfaction of the different commercial banks.

- iv) It is hoped that the findings of the study may also promote existing knowledge in understanding the association between ATM service and customer satisfaction in the financial sector.

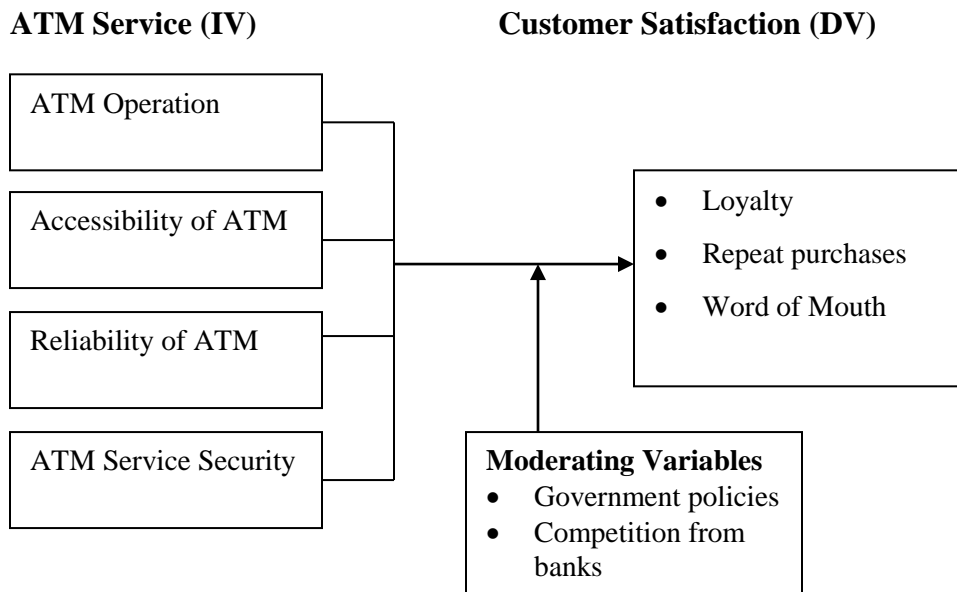
1.7 Justification of the Study

In the case of Uganda, the banking sector has undergone several reforms focused among other things toward customer satisfaction. The restructuring of the banking sector has not helped eliminate the delivery of substandard financial services to the public. This notion was supported by the BOU report of 2012 which revealed that financial institutions had an uphill task to close the gaps that undermined customer satisfaction and promote ATM services. From the existing literature (Parasuraman et al. 2005; Zeithaml et al, 2006; Zeithaml and Bitner, 2000), lot of research has been carried out on ATM services in financial institutions in the financial sector, however, few studies have been carried out to investigate the effect of ATM service on customer satisfaction in commercial banks. Thus, providing a research gap to be filled; by the study after examining the effect of ATM services on customer satisfaction at Stanbic Bank Uganda Limited.

1.8 Conceptual Framework

The conceptual framework was developed after review of related literature on the study variables. The model shown in the figure below examines the relationship between ATM service and customer satisfaction. ATM service is paramount in connecting the service to the customer in such a way that customer satisfaction is attained.

Figure 1.1: Conceptual Framework



Source: Developed from the literature of Parasuraman et al. 2005; Zeithaml et al, 2006; Zeithaml and Bitner, 2000

After conducting the extensive literature review, the theoretical framework was designed. The presented conceptual framework explains the interface between the independent variable and the dependent variable and the expected out come. The model shown in the figure above examines the relationship between ATM service and customer satisfaction in the banking sector. ATM service plays a big role in enhancing customer satisfaction in such a way that service orientation, value for money, dependability and diligence adherence are attained as Kotler and Keller (2009) assert. According to Xi and Zhang (2009), service is positively related to customer satisfaction. The same was observed by Kotler, Armstrong, Saunders and Wong (2002) for the relationship between ATM service and customer satisfaction posting that through ATM operation, accessibility of ATM, reliability of ATM and ATM service security this would promote favorable ATM service which would in turn enhance customer satisfaction. The key factors related to ATM service were synthesized to form this presented conceptual

framework. Figure 1.1 above explains the relationship between the independent and the dependent variables including the expected outcome. Service quality as the independent variable has a causal outcome on the dependent variable (customer satisfaction). ATM service comprises of ATM operation, accessibility of ATM, reliability of ATM and ATM service security whereas, customer satisfaction was measured according to loyalty, repeat purchases and word of mouth. Therefore, the study attempted to establish how the identified ATM service practices affect customer satisfaction with the legal framework as the moderating factor which comprised of policies, regulations, rules and competition from other banks.

1.9 Definition of Key Terms

- Service quality: Parasuraman et al. (2005) defined service quality as the customer's comparison between service expectation and service performance. Thus, delivering quality service means conforming to customer expectations on a consistent basis. For the purposes of the study, ATM service was measured according to ATM operation, ATM accessibility, ATM reliability and ATM security.
- Customer satisfaction: is the customers' evaluation of a product or service in terms of whether that service has met their needs and expectations. The satisfied customer would remain loyal, require service more often, less price sensitive and shall talk encouraging things about the company (Zeithaml and Bitner, 2000). For purposes of the study customer satisfaction was assessed in regard to loyalty, repeat purchases and word of mouth (referrals).

1.10 Conclusion

This chapter provided a background to the problem of the study, the general objective of the study, research objectives, research questions, scope of the study, importance of the study, the model and the definition of key terms, which led to the next chapter of literature review on service and customer satisfaction.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter gives a discussion of the literature on the study variables i.e. ATM service and customer satisfaction. This chapter helped broaden the researcher's understanding of the variables under study. The literature review was focused on the theoretical review and the study objectives thus; examine the influence of ATM operations on customer satisfaction, find out the effect of ATM accessibility on customer satisfaction, the influence of ATM reliability on customer satisfaction and, assess ATM service security on customer satisfaction.

2.2 Overview of Automated Teller Machines

ATM is the abbreviation of Automated Teller Machine and it is an electronic appliance that gives out or receives cash deposits from account holders. A smart card is used to initiate and complete a transaction with the machine (Odewale, 2008). Whereas (Amoah-Mensah, 2010) defined an ATM as an innovative service delivery mode that offers diversified financial services like cash withdrawal, funds transfer, cash deposits, payment of utility and credit card bills, cheque book requests and other financial enquiries. An Automated Teller Machine is typically made up of the Central Processing Unit (CPU) for controlling the user interface and transaction devices, magnetic or Chip card reader for identifying the customer, display which is used by the customer for performing the transaction, function buttons usually close to the display or a Touch screen used to select the various aspects of the transaction and a record printer which provides the customer with a record of a transaction (Cronin and Mary, 1997).

The Uganda Banker (2010) explains ATMs as specialized computer terminals which are continuously on line connected to the banks central computer to provide a number of facilities. ATMs are a cornerstone of self-service banking. They give vending-machine convenience to customers to the effect and withdrawals of cash transactions that have historically played a key role in the banking branching decisions. According to Bauer, et. al., (2006), commercial banks introduced ATMs in order to avoid mistakes of manual systems, improve on security of both the bank and their customers, reduce the time taken for customers to finish a transaction and increase the banking time of their customers. This is one of latest technology techniques in commercial banks of Uganda. Automated Teller Machines are Electronic funds transfer (E.F.T) device. They provide time and space to customers (The Ugandan Banker, 2013). Most Automated Teller Machines are connected to interbank networks, enabling people to withdraw and deposit money from machines not belonging to the bank where they have their account or in the country where their accounts are held thus enabling cash withdrawals in local currency (Maxwell, 1990). They are often identified by signs above them indicating the name of the bank owning them.

ATMs provide a wide range of services though not all banks offer the same services. These include: Cash withdrawals, payment of school fees, balance inquiry, ordering a statement, topping up airtime using their mobile phones, ordering a new cheque book, making deposits, requesting information about other services offered by the bank, paying credit, paying bills and obtaining a mini-statement (Chartered Institute of bankers Journal, 2010). The researcher would summarize that an ATM is a self service device that requires a card and pin to access

and it eases transactions that would have been done in the banking halls such as cash withdraws, deposits, balance inquiry and statements among others.

2.3 Theoretical Review

Mugenda and Mugenda (2003) define a theory as a system of explaining phenomena by stating constructs and the laws that interrelate these constructs to each other. Theories have been reviewed to explain the effect of ATM service on customer satisfaction. Consequently, in the course of its development, a number of different competing theories based on various standards have been postulated for explaining customer satisfaction. For the purpose of this study, assimilation theory and innovation diffusion theory were adopted for the study.

2.3.1 Assimilation theory

This theory is based on Festinger's (1957) dissonance theory. Dissonance theory states that consumers make some kind of cognitive comparison between expectations about the product and the perceived product performance. This view of the consumer post-usage evaluation was introduced into the satisfaction literature in the form of assimilation theory. According to Anderson (1973), consumers seek to avoid dissonance by adjusting perceptions about a given product to bring it more in line with expectations. Consumers can also reduce the tension resulting from a discrepancy between expectations and product performance either by distorting expectations so that they coincide with perceived product performance or by raising the level of satisfaction by minimizing the relative importance of the disconfirmation experienced. Payton et al (2003) argues that Assimilation theory has a number of shortcomings. First, the approach assumes that there is a relationship between expectation and

satisfaction but does not specify how disconfirmation of an expectation leads to either satisfaction or dissatisfaction.

Second, the theory also assumes that consumers are motivated enough to adjust either their expectations or their perceptions about the performance of the product. A number of researchers have found that controlling for actual product performance can lead to a positive relationship between expectation and satisfaction. Therefore, it would appear that dissatisfaction could never occur unless the evaluative processes were to begin with negative consumer expectations. The model implies that customers purchase goods and services with pre-purchase expectations about the anticipated performance. The expectation level then becomes a standard against which the product is judged. That is, once the product or service has been used, outcomes are compared against expectations. If the outcome matches the expectation confirmation occurs. Disconfirmation occurs where there is a difference between expectations and outcomes. A customer is either satisfied or dissatisfied as a result of positive or negative difference between expectations and perceptions. Thus, when service performance is better than what the customer had initially expected, there is a positive disconfirmation between expectations and performance which results in satisfaction, while when service performance is as expected, there is a confirmation between expectations and perceptions which results in satisfaction.

2.3.2 Innovation diffusion theory

In regard to this theory, Rogers (1983) explains that individual's intention to adopt a technology as a modality to perform a traditional activity. DIT is a theory that seeks to explain how, why, and at what rate new ideas and technology spread through cultures. As a

consequence diffusion processes result in the acceptance or penetration of a new idea, behaviour, or physical innovation. Rogers identified several attributes of an innovation that are key influences on adoption behaviour such as use of ATMs. According to Rogers, these include; relative advantage, complexity, compatibility, trialability, and observability. Relative advantage results in increased efficiency, economic benefits and enhanced status (Rogers 2003). Research suggests that when user perceives relative advantage or usefulness of a new technology over an old one, they tend to adopt it (Rogers 2003) and in the process their needs are met. In the context of electronic banking for example, use of ATMs, benefits such as immediacy, convenience and affordability to customers have been reported (Lin 2011).

Complexity is the opposite of ease of use. Ease of use refers to the extent to which electronic banking is perceived as easy to understand and operate. Lin (2005) suggests that there is a strong impact of perceived ease of use of new technology on its adoption and in turn lead to customer satisfaction. As mobile banking services have very user friendly interfaces, users see them as easy to use, and hence to form positive attitudes towards them (Lin 2011). Users will be inhibited to use electronic banking if they find it requires more mental effort, is time-consuming or frustrating. Compatibility is a vital feature of innovation as conformance with user's lifestyle can propel a rapid rate of adoption (Rogers 2003). Ndubisi and Sinti (2006) showed that compatibility is a significant antecedent in determining consumers' attitude towards internet banking. Compatibility has further been found influential in the adoption of virtual store (Chen, et. al., 2004), m-payment (Chen 2008), and mobile banking (Lin 2011). Thus, it is also likely that the relation between compatibility and customer satisfaction will hold in the context of electronic banking.

Observability of an innovation describes the extent to which an innovation is visible to the members of a social system, and the benefits can be easily observed and communicated (Rogers 2003). In the context of electronic banking, observability is defined as the ability to access the banking services at any time and from any location without any delay or queue, and seeing the effect of mobile banking transactions immediately, and conveying the accessibility benefits to others. Through such exposure, customers gain knowledge about electronic banking and its benefits, thereby facilitating customer satisfaction. Potential adopters who are allowed to experiment with an innovation will feel more comfortable with it and are more likely to adopt it (Rogers 2003). Further support is given by Tan and Teo (2000) who argue that if customers are given a chance to try the innovation, it will minimize certain unknown fears, and lead to satisfaction. With banks providing assistance and demonstrations on electronic banking usage while in the trial period, fears about electronic banking can be minimized and this will also motivate potential adopters to use electronic banking. Risk perception by customers usually arises due to the doubt related to the degree of inconsistency between customers' judgment and real behavior, and technology failing to deliver its anticipated outcome and its consequent loss (Chen 2008).

In the context of electronic banking, the perception of risk is even more important due to the threat of privacy and security concerns (Luarn and Lin 2005). Secondly, fear of loss of PIN codes may also pose security threats. Thirdly, some users also fear that hackers may access their bank accounts via stolen PIN codes (Poon, 2008). Finally, some users may also have a fear of loss or theft of a mobile device with stored data. Therefore, perceived risk is more likely to negatively affect the electronic banking adoption. While there are many studies that define

adoption in terms of implementation, usage, utilization, or satisfaction; this study uses satisfaction as it is the most widely used single measure of ATM service. Satisfaction has often been used as the dependent variable for IT success. It is hard to deny the success of a system where users say that they like it.

2.4 Customer Satisfaction

Customer satisfaction has been defined by many authors. Kotler and Keller (2009) defined customer satisfaction as the product of the accumulated experience of a customer's purchase and consumption. Porter and Miller, (1985) defined customer satisfaction as a post consumption evaluation that meets or exceeds expectations. Customer satisfaction is the state of mind that customers have about a company and how their expectations have been met or exceeded over the life time of the product or service. The success of customer satisfaction leads to company loyalty and product repurchase (Khan, 2010). Kotler and Keller (2009) argued that customer satisfaction doesn't bring in the cash, but customer behavior does. Companies should treat their employees like customers, and their customers like employees. This will lead to better results, improved quality of services, higher productivity, lower costs and greater opportunity for error recovery.

A customer can be a consumer, but a consumer may not necessarily be a customer. Levy (2009) explained this difference by stating that a customer is the person who does the buying of the products and the consumer is the person who ultimately consumes the product (Levy, 2009). When a consumer/customer is contented with either the product or services it is termed satisfaction. Satisfaction can also be a person's feelings of pleasure or disappointment that results from comparing a product's perceived performance or outcome with their expectations

(Kotler and Keller, 2009). As a matter of fact, satisfaction could be the pleasure derived by someone from the consumption of goods or services offered by another person or group of people; or it can be the state of being happy with a situation.

Satisfaction varies from one person to another because it is utility. Client happiness, which is a sign of customer satisfaction, is and has always been the most essential thing for any organization (Bennett and Barkensio, 2005). Customers may explain their satisfaction with a product or service in terms of specific aspects such as the product attributes, price, customer service, or a combination of these different features. Khan (2010) identified multiple studies conceptualizing satisfaction as an outcome resulting from a consumption experience while others conceptualize it as an evaluation of a consumption process. When a consumer claims to be satisfied with the product or service, he means that he likes the way it has performed in use. Satisfaction attitudes are retrospective evaluations of the product, based on experience. Kotler and Keller (2009) argued that consumer satisfaction with a product refers to the favorableness of the individual's subjective evaluation of the various outcomes and experiences associated with buying or using it.

According to Schiffman and Karun (2004), customer satisfaction is defined as the individual's perception of the performance of the products or services in relation to his or her expectations. In simple terms, customer satisfaction could be the pleasure obtained from consuming an offer. Measuring customer satisfaction could be very difficult at times because it is an attempt to measure human feelings. It was for this reason that Levy (2009) presented that the simplest way to know how customers feel and what they want is to ask them; this applied to the informal measures. There are three ways of measuring customer satisfaction: a survey where

customer feedback can be transformed into measurable quantitative data, focus group or informal where discussions orchestrated by a trained moderator reveal what customers think and informal measures like reading behaviours signs, talking directly to customers (Levy, 2009). Asking each and every customer is advantageous in as much as the company will know everyone's feelings, and disadvantageous because the company will have to collect this information from each customer. There exist two conceptualizations of customer satisfaction thus, transaction-specific and cumulative (Bennett and Barkensio, 2005). Following the transaction specific, customer satisfaction is viewed as a post-choice evaluation judgment of a specific purchase occasion (Eshghi, Roy and Ganguli, 2008).

Customer satisfaction is the valued outcome of a good business practice. According to Schiffman and Karun (2004), the principle purpose of a business is to create satisfied customers. Increasing customer satisfaction lead to higher future profitability, lower costs related to defective goods and services. Higher satisfaction increases willingness of buyers to pay price premiums, provide referrals, and use more of the product, and finally results into higher levels of customer retention and loyalty (Eshghi, Roy and Ganguli, 2008). Increasing loyalty further increases future revenue and reduces in the cost of future transactions. A firm's future profitability depends on satisfying customers in the present and retained customers are viewed as revenue producing assets for the firm. Improved customer satisfaction need not entail higher costs, in fact, improved customer satisfaction may lower costs due to a reduction in defective goods, product re-work, etc (Levy, 2009). Customer satisfaction and retention that are bought through price promotions, rebates, switching barriers, and other such means are

unlikely to have the same long-run impact on profitability as, when such attitudes and behaviors are won through superior products and services (Giese and Cote, 2002).

The studies of Khan (2010), Herington and Weaven (2009) who posted that automated banking service quality that is reliability, convenience and accuracy have the potential to empower customers of financial services and is positively associated with customer satisfaction. Ranaweera and Prabhu (2003) observed that customer satisfaction, loyalty and retention might be the only sustainable competitive advantage in the challenging economic times. Ranaweera and Prabhu (2003) defined customer loyalty as a customer's sustained commitment to a company as demonstrated by repeat purchases, increased wallet share and positive word of mouth referrals. The key to customer loyalty is customer satisfaction and customer satisfaction begins with providing customers with superior service. The research indicated that when a company commands such loyalty, the benefits go considerably beyond incremental value Ranaweera and Prabhu (2003).

Loyal/satisfied customers purchase more and more often. It costs much less money for one to strengthen the relationship an existing customer, than to begin a new relationship with a new customer. Satisfied customers have higher response rates than non-loyal customers. Less money is spent on loyal customers to achieve the results (Gerrard and Cunningham, 2003). Marketers identified customer satisfaction through behavioral, cognitive and attitudinal response to the service provider. These dimensions manifest in repeated use of services, tolerance with regard to price, word of mouth promotion and display of cognitive and attitudinal behavior (Bowen & Chen, 2001).

Loyal customers are those who have the enthusiasm about the brands or products they use. The more enthusiastic a customer is, the higher the profit contributed to the brand. Musiime and Biyaki (2010) stated that loyalty is a combination of intentional repurchase behavior and psychological attachments of a customer to a particular service provider. The fundamental assumption of all the loyalty models is that keeping existing customers is less expensive than acquiring new ones. In summary, Loyalty is customer's demonstration of faithful adherence to an institution despite the occasional errors. Thus satisfying a customer is very paramount to organizations existence. Loyalty is often measured as a combination of measures including overall satisfaction, likelihood of repurchase and likelihood of recommending the brand to a friend.

Khan (2010) conducted an empirical study of Automated Teller machine Service and Customer Satisfaction in Pakistani Banks. The study investigated significant determinants of ATM service and its effects on customer satisfaction. Khan (2010) indicated the significant dimensions of ATM service as convenience, efficient operation, security and privacy, reliability and responsiveness. This literature was reviewed because of its emphasis on the examination of the essential dimensions of ATM service and analysis of its effects on customer satisfaction as stated in the main objective. The results of the research reflect a positive and statistically strong relationship between ATM service and customers satisfaction. Therefore, customer satisfaction is that experience a client of the bank faces after consuming/utilizing a service; whether it meets or exceeds their expectations. This would be witnessed through customer loyalty by only using the ATMs, repurchase behavior by continuing to access the service of ATMs and the recommending aspect (referral) to his/her colleagues.

2.5 ATM Operation/Usage and Customer Satisfaction

Mccloskey (2004), in his study found that continued usage of a technology is based on its usefulness. Perceived usefulness is tied to an assessment of the benefits that accrue to an individual or firm by using the technology (Chong et al., 2010). However, perceived ease of use exhibits an indirect relationship via usefulness on usage. Hence perceived usefulness is more salient than ease of use in determining usage. It was found that usefulness, the extent to which buying products using a technology is convenient and efficient, has an impact on the number of times an individual purchases items using the technology (Amoah-Mensah, 2010). Curran and Meuter (2005) echoed that, the technology's attributes can affect usage and users perceptions of the technology. This proposition is basic to the efficiency of user evaluations of information systems. Prasad (2008) suggests that it is individuals' perceptions of attributes which predict the rate at which an innovation is adopted. Users' continuance intention is determined by perceived usefulness of information system continued use and their satisfaction with IS use.

According to Odusina (2014), citizens' intentions to use a new technology will increase if they perceive the service to be useful. Perceptions of the usefulness of a system, influences citizens' intentions to adopt it. Lucie Lafourcade, Isern, Mwangi, and Brown (2005) argued that the technologies used must benefit the customer and the strategies used to attract customers to using these technologies must address the proper concerns and perceived benefits in the customers' minds. According to Chong et al., (2010), perceived usefulness of a system has a significant direct impact on its usage. Findings further show that usage of information system is driven by their perception of the system's usefulness. Curran and Meuter (2005),

support the argument that user acceptance of computer systems is to a large extent driven by perceived usefulness. Prasad (2008) complemented that users need to perceive the system as being useful or else they will not attempt to use it. Odusina (2014) added that prospective user's usefulness towards a given system is a major determinant of whether he or she would actually use it.

The greater the use of a technology, the greater will be the users' intention to use the technology (Amoah-Mensah, 2010). Continued usage of a particular system increases the consumers' acceptance of MIS (McCloskey, 2004). According to Chong et al., (2010), the use of a system depends on the user's evaluation of that system. If the system improves the user's task performance or decision quality, then they tend to use the system otherwise they may avoid using it. System use is an appropriate measure of information system success in most cases. Amoah-Mensah (2010) found that users' intention to continue using a technology is considered a major determinant of its success because initial use of the technology is the first step towards realizing its success. Success depends on its continued use or continuance after initial use. McCloskey (2004) considered system use as the necessary condition under which information technology can affect performance.

As people get the experiences about the system and learn necessary skills, they are likely to develop more favorable perceptions of its easy use (Odusina, 2014). Prasad (2008) stated that ease of adoption subsequently leads to technology acceptance. According to Amoah-Mensah (2010), a system that is difficult to use is less likely to be perceived as useful. Additionally, Roztock and Weistroffer (2004) posited that there must be some degree of fit between the task and the technology that has been chosen to accomplish it. Ahmed, et. al., (2010) suggested that

systems use leads to user satisfaction. The amount of use can affect the degree of user satisfaction, positively or negatively (Amoah-Mensah, 2010). Roztocki and Weistroffer (2004), added that a successful system will provide benefits to the user such as helping the user to do more or better work in the same time or take less time to achieve as much work of the same quality as was done in the past.

Perceived ease of use is defined as the degree to which a person believes that using a particular system would be free of effort. According to Prasad (2008), since effort is a finite resource that a person may allocate to various activities, it implies that all else being equal, an application perceived to be easier to use than another is more likely to be accepted by users. Systems that are complex or difficult to use are less likely to be adopted since it requires significant effort and interest on the part of the user. Perceived ease of use is measured in terms of how clear and understandable is the interaction with the system, ease of getting the system to do what is required, mental effort required to interact with the system and ease of use of the system (Amoah-Mensah, 2010). Ease of use includes aspects such as functionality, accessibility of information, ease of ordering and navigation. McCloskey (2004) established that both ease of use and usefulness are components of some aspects of electronic commerce acceptance. Perceived ease of use is tied to an individual's assessment of the effort involved in the process of using the technology.

In addition other studies by Melville, Kraemer and Gurbaxani (2004), found that perceived ease of use has a crucial influence in developing the perceived usefulness. This highlights the role of ease of use in understanding the causal relationships among the constructs. When ease of use perceptions are low and the technology is perceived as less useful, intentions to use the

technology are weakest (Odusina, 2014). When the consumers perceive the service to be complex, and difficult to use it is likely they will have difficulty in recognizing the perceived usefulness of the new technology.

The ATM is an innovative service delivery mode that offers diversified financial services like cash withdrawal, funds transfer, cash deposits, payment of utility and credit card bills, cheque book requests and other financial enquiries (Amoah-Mensah, 2010). Technology can be intimidating to most customers and therefore one expects that ATMs should be designed to simplify the transactional process for customers. Ease of use is one concept that has been investigated in the technology adoption studies especially in work place environments. Chong et al., (2010) argues that if users feel that online banking is easy to use and free of hustle, then the chances of them using the system will be greater. Research shows that ease of use is a major factor in determining the adoption and use of various corporate information technologies such as online banking (Gounaris & Koritos, 2008).

Gounaris and Koritos (2008) states that ATMs saves time; one does not need to come to the bank and wait in a queue or fill some paper work all the times when one want to withdraw cash. According to Odusina (2014), in his managerial auditing journal ATMs are also easy to use. That is, the machine guides the customer through each step by following instructions on the screen. To use the machine the demanding convenience is increasingly catered for by ATMs. People who are illiterate usually find it difficult to operate the ATM because it requires reading out instructions; this is in line with the study carried out by Khan when he stated in his findings that technical complexities and lack of knowledge are the major problems of the ATM usage (Khan, 2010). Gounaris and Koritos (2008) found that although the world has witnessed

a successful and widespread use of the ATM, a significant proportion of bank customers are not using it or experience difficulties when interacting with it. To address this trend they suggested that speech guiding technology should be incorporated in the ATM to encourage customers patronize its services.

Chong et al., (2010) examines the relationship between the dimension of usage rate and performance expectation with customers' prolonged satisfaction with ATM services. The results indicate that usage rate has a negative association with customers' perceived prolonged satisfaction whereas performance expectations are found to have positive and significant effects on customers' prolonged satisfaction. According to Odusina (2014) while investigating the level of ATM usage and customers satisfaction in Nigeria using comparative analyzes of three banks in Ogun State Metropolis of Nigeria. The study employed primary data, sourced through questionnaires which were administered to a total of 200 respondents, cutting across the three banks. The data were analyzed using the Chi-square statistical tool, the study thus revealed that there is a positive and significant relationship between ATM usage and customers' satisfaction.

Basing on the above studies, the researcher concludes that ATM operations have influenced customer satisfaction through the easy languages used, user friendly service with an ease in interpretation. However the illiterate and technology naïve population would find ATM operations a challenge hence the need for some speech guiding technology as stated by Odusina (2014). This study used the concept to mean the degree to which ATMs systems offer a hassle free transaction for the customer. The study was hence carried out to find out whether ATM operations has an influence on customer satisfaction in the banking sector.

2.6 ATM Accessibility and Customer Satisfaction

One of the major determinants of service quality is timely and adequate response. Employees should be willing and able to deliver timely and substantive response to inquiries and complaints of customers (Saunders, Lewis and Thornhill, 2009). Service recovery and problem solving have long been recognized as important parts of services quality. The relative importance of timely versus substantive response differs between different organizations. Such differences arise as a result of the relative value with which time is regarded in each of these markets. While some customers place a higher value on time, Ananth, Ramesh and Prabakaran (2011) stated that some characterize time as a limited and scarce resource; the term saving time in fact implies reallocating time across activities to achieve greater efficiency. The marketing literature assumes that there is a relationship between time scarcity and customer's desire for goods and services that offer convenience (Saravanan and Rao, 2007).

Namasivayam (2004) emphasized that when a customer has a need, meet it, be easily accessible and available to customers. They emphasize that responding fast to customer requests breeds better relations which in turn impact on customer satisfaction (Wang and Hing-Po, 2002). Xi and Zhang (2009) observed that when the service failure occurs the firm response has the potential to either restore customer satisfaction and reinforce loyalty or fail to handle and drive the customers to competition. Customer too have an ardent desire of getting services at places where they feel comfortable and where the service provided is in their perception of highest quality as advanced.

Namasivayam (2004) posited that consistently addressing the needs of the customer through

attention to detail, prompt and courteous assistance, and the use of knowledgeable employees is the first objective in providing a memorable experience. Effective customer service policies focus on providing consistent services. When a firm creates a customer centric and high quality service policy it continues to create lasting value for the customer. Eshghi, Roy and Gangul (2008) suggested that good service delivery elicits the best outcome in terms of customer satisfaction and consequently with the satisfaction there is success and in turn increase in customers. According to Omankhanleu (2009), there is more need for more systematic assessment of customer satisfaction rather than sitting back and waiting for problems to emerge.

Xi and Zhang (2009) found locational convenience as an important influence on bank selection. As the ATM offers an alternative way of conducting banking transaction outside the banking halls, locational convenience, ATM site is also an important quality determinant. Locational convenience refers to the site at which the ATM is located. Most ATMs are located in convenient places such as within the bank premises (on site ATMs) and away from the bank premises(off site ATMs) , such as at the air ports, super markets, fuel filling stations, shopping malls among others. Sometimes, the bank's ATM card is compatible with other banks ATM platforms and this makes it possible for customer to withdraw money from other ATMs at a small fee. Convenience also involves "an all-day all-night" availability of the service to the customers. If the ATMs are conveniently located, the inconvenience in moving long distances in order to carry out transactions will be minimized (Ahmed, et. al., 2010).

Accessibility as adapted from the work of Xi and Zhang (2009) as approachability and ease of contact to services. To provide ease of access to ATMs, it should be made available at public

places such as airport, shopping centers, Petrol/Gas stations etc. making the ATMs available at both on-banks and off-banks premises is expected to reduced congestion at ATM centers, which mostly lead to security problems. ATMs are of great help to many customers because they do not have to carry large amount of cash with them. They can withdraw cash from any city or state, across the country and even from outside their country with the help of ATM.

Ananth, Ramesh and Prabakaran (2011) specified that most modern ATMs are also now incorporated with cash deposit features as well as utility payment features such as cellular talk time top up, water and electricity payment for prepaid customers. The ATM screen can also serve as an advertising space for banks to advertise their products. Ahmed, et. al., (2010) pointed out that, “Improved access generates unmeasured but presumably not unvalued time savings for the users.” Saving money comes about in the sense that the customer will be able to draw money as and when they need it. The payment of utility bills like water and electricity via the ATM would also result in time saving and money as the customer is able to make these payments at the ATM points instead of having to travel to the various utility bills payment points (Xi and Zhang, 2009).

Ananth, Ramesh and Prabakaran (2011) in a study of ATM users in Canada, established that major reasons for using ATM were accessibility, freedom to do banking at all times, and to avoid waiting lines. The study also found the users’ anxiety about the risk associated with its use and complexity of the machine in executing the transaction. Chinedu, et. al., (2012) identified secure and convenient location, adequate number of ATM, user-friendly system, and functionality of ATM. Shamsdouha, Chowdhury and Ahsan (2005) found that 24 hours service, accuracy, and convenient locations were the main predictors of customer satisfaction. The study

also indicated lack of privacy in executing the transaction, fear of safety and complexity of the machine were the major cause of concern for the customers. Chinedu, et. al., (2012) found that accessibility and location of ATMs significantly affected user satisfaction. The research found that customers were willing to accept new offerings through ATMs.

In an another study in Bangladesh found that 24 hours service, accuracy, and convenient locations were the main predictors of customer satisfaction (Shamsuddoha, et. al., 2005). Still, ATM accessibility can be summarized as the ease of convenience of the machines and this gives customer satisfaction to the receiver when fewer people are found at the ATM points and when the machines are strategically situated and in operation. Therefore, this study was carried out to establish whether ATM accessibility has an influence on customer satisfaction in the banking sector.

2.7 ATM Service Reliability and Customer Satisfaction

According to Eshghi, Roy and Ganguli (2008), service reliability construct consists of mainly two dimensions that are titled as inspiring promises and doing it right. The most important reason of concentration to this construct is intangible services, which usually requires greater service reliability between customers and service providers. Therefore, service reliability has a greater impact on services than on goods (Xi and Zhang, 2009). Reliability is defined as the ability to perform the promised service dependably and accurately. In its broadest sense, reliability means that the organization delivers on its promises about delivery, service provision, problem resolution, and pricing. Customers want to maintain good relations with organizations that keep their promises, particularly promises about the service outcomes and core service attributes.

According to Eshghi, Roy and Ganguli (2008), reliability is the most important dimension of service quality. In the virtual environment, it is vital to make customers trust that the organization is going to perform what it promises to do. Therefore, high service reliability is the flawless performance of a pre specified service, such as a train that arrives on schedule, a well-tuned car after maintenance, or a charity fund that rightfully redistributes subscribers' donations (Xi and Zhang, 2009). In service markets, especially with highly specialized services, customers are often expected to contribute to a service by providing information about the specifications desired. Standard services, on the other hand, do not involve much customer-tailored specification before purchase. Especially in situations of mass marketing, one may expect a hiatus between the appraisal of customer needs by service providers and customers themselves (Poon, 2008) to occur frequently.

Service reliability means consistently performing the service dependably and accurately. According to Ananth, Ramesh and Prabakaran (2011), service reliability is the service core to most customers and managers should use every opportunity to build a do-it-right-first-time attitude. Specifically, managers are encouraged to include reliability issues in their mission statements, set reliability standards, teach the importance of reliability in training programs, appoint reliability teams to study specific services and recommend ways to improve reliability, measure error rates and reward error-free service (Poon, 2008). Portraying the reliability and consistency with which the service is delivered can take two routes. The first involves emphasizing the technological superiority and dependability of the process by which the service is produced a high tech approach. The second concerns the consistent and dependable performance of the service Personnel a high touch approach. Social interaction and personal

connectivity form the basis for emotional bonds, especially in services with high credence properties (Xi and Zhang, 2009).

Eshghi, Roy and Ganguli (2008) stated that service realization not only concerns the outcome of the service process but also the actual creation and execution of the service. It involves the service encounter, human contact, operations, time and environmental factors. For example, in highly standardized fast food restaurants customers have to accept the products and restaurant formula as they are. Under these circumstances, customers are focused on the employee encounter, length of waiting lines and other features of service realization as asserted by Negi (2009). Unsatisfactory instrumental performance will always result in dissatisfaction. For customers, long waiting lines, rude encounters with service personnel and a miserable service environment will lead to dissatisfaction. A mismatch between service specifications and customer needs will not lead to satisfaction either regardless of the quality of the realization. Customers will always want to see at least some of their needs and demands reflected in the service specifications (Ahmed, et. al., 2010). Thus, the better the match between service specifications and customers' needs, the more satisfied customers are. Service reliability is a salient dimension of customer satisfaction evaluation, meaning that it has to be achieved to satisfy customers (Saunders, Lewis and Thornhill, 2009).

Ahmed, et. al., (2010) argue that reliability is the strongest predictor of customer satisfaction and the second predictor of customer loyalty because it embeds the dynamic capability to perform the promised service dependably and accurately. Reliability depends on handling customers' service problems, performing service right the first time, provide services at the promised time and maintaining error-free record. Furthermore, reliability was stated as the

most important factor in conventional service (Poon, 2008). Reliability also consists of accurate order fulfillment, accurate record, accurate quote, accurate in billing, accurate calculation of commissions, keep services promise. (Yang, et. al 2004) further mentioned that reliability is the most important factor in banking services. Banking customers also have come to expect high reliability in their ATMs, which provides incentives to ATM providers to minimize machine and network failures. Financial consequences of incorrect machine operation also provide high degrees of incentive to minimize malfunctions (Poon, 2008). Therefore, the study was carried out to establish whether ATM reliability has an influence on customer satisfaction in the banking sector.

2.8 ATM Service Security and Customer Satisfaction

Security is provided by the customer entering a personal identification number (PIN), (Adepoju & Alhassan, 2010). The importance of security and privacy for the acceptance of online banking has been noted in many banking studies (Ihejiahi, 2009). To be more precise, lack of privacy and security were found to be significant obstacles to the adoption of online banking. Chinedu, et. al., (2012) found that people have a weak understanding of online banking security risks although they are aware of the risks. Similarly, Chinedu, et. al., (2012) noted that although consumers' confidence in their bank was strong, their confidence in technology was weak. As the amount of products and services offered via the Internet grows rapidly, consumers are more and more concerned about security and privacy issues. According Obiano (2009), privacy issues have proven important barriers to the use of online services. As trust, security, and privacy are multidimensional constructs and need further explanation, in this article we concentrate only on the aspects consumers are most concerned about.

Contrarily, Chinedu, et al (2012) analyzed the negative effect of the ATM as a channel for delivery for banking services in Nigeria. Using a sample of 600 respondents, conveniently selected from two states of the federation. The data were analyzed using Chi-square. The study found that the ATM system of delivery banking service not only contribute to the increasing rate of bank fraud, but equally lures Nigerians into profligate expenditures. In summary, banks should strive to increase their security layers to subvert the tricks of web scammers and limit the amount which customers may be allowed to withdraw at a time Chinedu, et al (2012). Ihejiahi (2009) expressed concern about the lack of cooperation among banks in the fight to stem the incidence of ATM related frauds now troubling the industry. He expressed that the silence among banks on ATM frauds makes it difficult for banks to share vital information that will help curb the menace.

Obiano (2009) blamed the menace of ATM frauds on indiscriminate issue of ATM card without regard to the customer's literacy level. According to Obiano (2009), one of the frequent causes of fraud is when customers are careless with their cards and pin numbers as well as their response to unsolicited e-mail and text messages to provide their card details. Omarkhanleu (2009) stated that the current upsurge and infamous activities of Automated Teller Machine (ATM) fraudsters is threatening electronic payment system in the nation's banking sector with users threatening massive dumping of the cards if the unwholesome act is not checked. As with any device containing objects of value, ATMs and the systems they depend on to function are the targets of fraud. Fraud against ATMs and people's attempts to use them takes several forms. These include: Shoulder surfing, using stolen cards, card

jamming, use of fake cards, duplicate ATMs, card swapping, diversion and ATM burglary (A Report on Global ATM Frauds, 2007).

According to Islam (2015), since the usage of ATM has been increasing day by day in Bangladesh and the users of ATM argue that ATM and other technology based transaction is not enough safe and secured. On the other hand, a lot of people think that it is safe, secured, and ease to transfer funds from one account to another account, so it ensures cash withdrawal accuracy, save time and cost. Besides, there are some other factors such as PIN confidentiality, sufficient number of ATM, available cash in the ATM, quality of notes, network performance, and security, safety and privacy of ATM are the other factors which might influences the customers' satisfaction on ATM services.

Omankhanleu (2009) argued that expectation of security is essential in shaping customers' perception of service quality. Islam (2015) found that customer's perception of security and privacy played an essential role in their satisfaction. Obiano (2009) found that the concern of customers about security and privacy, while using this service, is a major cause of their dissatisfaction. Therefore, every person wants to be in a safe and sound environment; the need for ATMs to be in a secure location for the safety of customers and their funds is advocated for so, as to avoid frauds and card skimming. Hence, this study was carried out to ascertain whether ATM security has an influence on customer satisfaction in the banking sector.

2.6 Conclusion

Under literature review, a review of literature was carried out in relation to the study objectives. Literature on the effect of reliability on customer satisfaction was reviewed and

established that delivery of reliable bank services was important in the commercial bank sector much as this was more efficient in developed countries; it was still in its infancy stage in bank in developing countries. In regard to the contribution accessibility on customer satisfaction, the literature revealed that there was significant positive effect accessibility on customer satisfaction revealing that the more banks were responsive during service delivery, this enhanced customer satisfaction. From the literature on whether service usage affected customer satisfaction, it was revealed that when the banks' services were used by customers, this had a positive effect on their satisfaction.

ATM service is an important factor in determination of the level of customer satisfaction in organizations like SBUL since it is through service quality that an organization can meet customer needs among other factors. Service quality remains difficult to measure because it is often under what the customer expects yet service is a matter of meeting customer's expectations. SBUL must consistently give the best solutions to its problems to match its expectations, if it is to build customer satisfaction. Customer's perceptions are critical and it may be difficult to define what the customer wants. However many researchers have made efforts to research on customer satisfaction but little has been done on the relationship between service quality and customer satisfaction in organizations. Therefore, to create a satisfied customer base, banks should understand how service quality affects customer satisfaction in the commercial banking sector.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter proposes the methodology that the researcher used to investigate the relationship between ATM service and customer satisfaction in the banking sector. It gives details of the research study, area of study, study population, sampling procedures, data collection methods and instruments, quality control methods, data management and processing, data analysis to be used in the study, ethical considerations and limitations of the study.

3.2 Research Design

The study adopted a cross-sectional case study approach to help explain the current situation on ATM service and customer satisfaction and analyze the inherent problem when dealing with quantitative data. Cross sectional case study is a research design in which one or more samples of the population is selected and information is collected from the samples at one time. It makes a detailed examination of a single subject, group or phenomenon and enables collection of sufficient data regarding effects of managerial skills on procurement performance (Mugenda and Mugenda, 1999). A cross-sectional case study design was adopted because the study was only carried at Stanbic Bank Nakivubo branch. The design was descriptive and analytical in nature. For qualitative data, the study adopted the field research method where the researcher went to the field and took extensive field notes which were subsequently coded and analyzed in a variety of ways (Sekeran, 2003).

3.3 Area of Study

The researcher conducted the study in the central division, Kampala district. The study covered the area of Nakivubo branch which is gifted with 2 Automated Machines with 1 being an intelligent machine (Touch screen/Instant deposits). This area was chosen because of its high density of clientele at the branch and the number of transactions the ATMs handles.

3.4 Study Population

The study targeted clients of Stanbic Bank and other ATM users since they hold key information pertaining to the variables of the study because they use the ATMs. A total of 110 respondents were chosen to comprise the study. The population was arrived at due to the average number of transactions an ATM handles, which is about 100-120 transactions by cross checking on the daily ATM reports and journal roll figures of the ATMs. Thus each individual was attached to at least 1 transaction made.

3.5 Sampling Size and Selection

3.5.1 Sampling Size

Due to the fact that the study population was large, a sample size was selected from the population and used to represent the views of the entire population. The sample size of 86 for the respondents was selected basing on Krejcie & Morgan, (1970) table for determining sample size. The sample size comprised of bank customers especially those that are making use of the Automated Teller Machines.

3.5.2 Sampling Techniques

To attain the respective sample sizes from the population, the researcher used convenience sampling since a good number of ATM users not often have time to respond to issues like

sparing a few minutes to answer the questionnaires. The researcher then randomly approached the clients who had come to make transactions with the bank.

3.6 Data Collection Sources

This study made use of both primary and secondary sources of data. Primary data was obtained from the field and in particular from the selected respondents in the geographical scope of the study. Additional information was gathered through documentary review where a number of documents were reviewed. Documents on ATM service and customer satisfaction at the global level were also reviewed to identify the effect of ATM service on customer satisfaction according to the results of earlier studies conducted in different parts of the world.

3.7 Data Collection Tools

The tools that the researcher used for collecting data included a structured questionnaire and an interview guide.

3.7.1 Questionnaire

Questionnaire is a carefully designed instrument for collection of data in accordance with the research questions and hypothesis. Data was collected using a self administered questionnaire. The researcher developed a questionnaire that answered specific objectives of the study for respondents to complete in writing. The questionnaire was structured (close ended). A closed ended questionnaire was adopted by the researcher because it draws out specific responses which are easy to analyze, compare among different groups and are economical in terms of time and energy. It gave a correct summary of the situation and the data provided the effect of the independent on dependent variables. Using questionnaires, data was collected from

customers. The interval Likert scale questionnaire was designed on values assigned and ranked 5 to 1 in order of; 5-Strongly Agree, 4-Agree, 3- Neither Agree nor Disagree, 2-Disagree and 1-Strongly Disagree.

3.7.2 Interview Guide

An interview guide was used to collect data from key informants who comprised of staff/management members. Face to Face interviews were conducted. Interviews are a good tool as they enable the researcher gather in-depth information around the topic to meet specific needs. The researcher also clarified unclear issues in the questionnaire to the respondent. This method was used to collect data from the district officials. This data assisted in clarifying data collected by the structured questionnaires since it involved a face to face interaction and it also provided a whole range of views.

3.8 Quality of Data

To ensure that items in the instrument are reliable and valid, the instruments were subjected to validity and reliability tests as explained below:

3.8.1 Validity Test

In order to determine the appropriateness of the instrument used in the research, a pre-test was conducted and the validity of the instrument was measured by its content. According to Mugenda & Mugenda, (2003), there are three techniques of validity in data; construct validity, content validity and criterion-related validity. Construct validity is a measure of degree to which data obtained from an instrument meaningfully and accurately reflects or represents a theoretical concept. Experts in the fields of service quality and customer satisfaction were

given the instruments to assess what concept the instrument is trying to measure and to determine whether the checklist accurately represents the concept under study. Content validity is a measure of the degree to which data was collected using a particular instrument represents a specific domain of indicators or content of a particular concept. Content validity can be assessed by using two different instruments which must measure the same concept. Validity was determined by using Content Validity Index (C.V.I). $C.V.I = \frac{\text{Total items rated correct}}{\text{Total number of items in the questionnaire}}$. Kathuri and Pal (1993) argue that items with validity coefficients of at least 0.70 are accepted as valid and reliable in research.

Table 3.1: Validity

Variable	Anchor	Number of items	Content Validity Indices
ATM operation	5 point Likert Scale	7	.722
Accessibility of ATM	5 point Likert Scale	7	.804
Reliability of ATM	5 point Likert Scale	7	.739
ATM service security	5 point Likert Scale	7	.807
Customer satisfaction	5 point Likert Scale	7	.818

Source: Primary data, 2016

The computed CVIs for the different items all of them scored above 0.7 showing that they have met the acceptable standards (Amin, 2005). From the results all the Content Validity Indices ranged from .722 to .818, therefore meeting the acceptable standards.

3.8.2 Reliability Test

A pre-test on the reliability of the research instruments was carried out to establish whether the instruments were consistent in measuring the concepts it was intended to measure. Reliability in research is influenced by random error (Mugenda & Mugenda, 2003). They continue to

argue that random error may arise from inaccurate coding, ambiguous instructions to the subjects, interviewer's fatigue and interviewer's bias to mention a few and these errors are deviations from a true measurement due to factors that have not been addressed by the researcher. The researcher therefore ensured that the instruments minimized random error and hence increased the reliability of the data collected. In order to measure reliability, a score obtained in one item is correlated with scores obtained from other items in the instrument. Cronbach's Coefficient Alpha was then computed to determine how items correlated among themselves. According to Sekaran (2003), coefficient alpha of 0.6 and above was considered adequate.

Table 3.2: Reliability

Variable	Anchor	Number of items	Cronbach Alpha Value
ATM operation	5 point Likert Scale	7	.808
Accessibility of ATM	5 point Likert Scale	7	.817
Reliability of ATM	5 point Likert Scale	7	.775
ATM service security	5 point Likert Scale	7	.837
Customer satisfaction	5 point Likert Scale	7	.900

Source: Primary data, 2016

According to Cronbach (1950), coefficient alpha of 0.7 and above is considered significant. From the results all the Cronbach alpha coefficients ranged from .775 to .900, therefore meeting the acceptable standards.

3.9 Data Management and Analysis

After collecting the questionnaires and the interview schedules, the researcher did central editing to check the questionnaire for obvious errors such as wrong entry, and missing or

inappropriate replies. The researcher also contacted the respondents for clarifications where necessary.

3.9.1 Quantitative Data Analysis

The data collected was compiled, sorted, edited and coded to have the required quality, accuracy and completeness. It was then entered into the computer with the facilitation of Statistical Package for Social Sciences (SPSS Version 18) for analysis. SPSS is a data management and analysis program. It allowed the researcher to store and analyze very large amounts of large data. The statistics that SPSS is capable of are far more complex than the statistics that can be done in excel which makes it more desirable as an analysis tool. Using SPSS, the data was cleaned and analyzed according to the research questions where frequency tabulations were generated to present the results of the sample characteristics and item means, standard deviations, whereas, Pearson correlation used to present the results of the objectives of the study. Regression analysis was used to understand the combined effect of the dimensions used to measure ATM service on customer satisfaction.

3.9.2 Qualitative Data Analysis

Qualitative data analysis refers to non-empirical analysis. Qualitative data was analyzed into a manageable form and a narrative constructed around it (Amin, 2005). Information was analyzed in a systematic way in order to come to useful conclusion. Examples were used in the narrative in order to review trends and compare the respondents' opinions/perspectives of the issues being discussed. The data was classified into simple content categories, themes and sub-themes, closely examined and compared for similarities and differences. Qualitative data was obtained by way of an interview guide which was used to reinforce information gathered using

the questionnaire to draw meaningful conclusions. The respondent's responses were summarized and reflected in the study to support quantitative data.

3.9.3 Triangulation of Qualitative and Quantitative Methods

In evaluation, the researcher adopted both qualitative and quantitative methods. The integration of the methods is referred to as triangulation (Amin, 2005). It can also be referred to as the combination of several research methods in the study of the same phenomenon. This helped the researcher to provide more data to work with and ultimately a more accurate evaluation. This provided invaluable information and gave the evaluation heightened status within the area of study.

3.10 Ethical Considerations

When carrying out research the following ethical considerations were observed. Permission of the people who were to be studied was sought to conduct research involving them. This was done by attaining an introductory letter from the University introducing the researcher to the management of the bank. Written or verbal informed consent from all respondents was sought before interviews were conducted and the purpose and objectives of the study were carefully explained to the respondents. The researcher was careful not to cause physical or emotional harm to respondents and ensure objectivity during the research so as to eliminate personal biases and opinions. Likewise to ensure confidentiality of the respondents, the researcher designed the tools in such a manner where the respondent was not required to provide personal details such as names.

3.11 Limitations of the Study

- i) Some employees were not willing to be interviewed. However, this was solved by

engaging them further. There was resistance from the management of the commercial banks because of suspicion and the confidential information policy set up by the bank. Much time was spent with managers and respondents to explain that the questions were purely for academic purposes.

- ii) An introductory letter from the university administration was taken to SBUL. Respondents withholding information due to fear of being victimized, the researcher convinced the respondents that the information they provided was to be kept confidential.
- iii) The respondents were unwilling to fill questionnaires. The researcher realized that a number of respondents were not in position to fill in the questionnaires; the use of interviews was administered so that the customers could be given a clear picture of the statements.
- iv) Respondents having a view of not obtaining any direct benefit from the research results. However the researcher pointed out to them that the results of the study were to affect them indirectly through policy change and therefore, tried to convince the respondents to spare time to answer the questions.

3.12 Conclusion

Chapter three has dealt with research methodology providing the research design adopted for the study, the population from which a sample size was selected scientifically, and the tools used to collect the data, testing of the tools, data analysis, ethical considerations and limitations of the study. The following chapter dealt with the analysis, presentation and interpretation of the study results.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

4.0 Introduction

This chapter presents the empirical findings, analysis and interpretation of the study according to the purpose and objectives of the study. The chapter is comprised of five sections. Section one presents the introduction, section two represents the response rate, section three dealt with the demographic characteristics which include gender, age group and occupation using frequency tabulations. Section four, dealt with empirical findings on the study objectives using percentages, item means and correlations. Section five dealt with multiple regression which presented the results on the combined effect of the independent variables on the dependent variable using regression analysis.

4.1 Response Rate

Response rate in survey research refers to the number of people who answered the survey divided by the number of people in the sample. It is usually expressed in the form of a percentage. Therefore, response rate is viewed as an important indicator of survey quality. According to Amin (2005), posits that higher response rates assure more accurate survey results. Out of the 86 respondents, 70 selected respondents provided responses for the study, giving a response rate of 81.4%.

4.2 Demographic Characteristics of Respondents

Demographics are current statistical characteristics of a population. Commonly examined demographics include gender, race, age, disabilities, mobility, home ownership, employment

status, and even location (Yuko Oso and Onen, 2009). Demographic profiling is essentially an exercise in making generalizations about groups of people. Demographic information is aggregate and probabilistic information about groups, not about specific individuals. To present demographic characteristics, frequency tabulations were used to indicate variations of respondents based on gender, age group and occupation. The demographic characteristics were presented basing on the responses from the respondents.

4.2.1 Gender Distribution

Frequency tabulation was used by the researcher to present the distribution of gender of the respondents. Table 4.1 below presented the results:

Table 4.1: Showing Gender Distribution

Category	Frequency	Percentage
Male	45	64.3
Female	25	35.7
Total	70	100.0

Source: Primary data, 2016

From the results in table 4.1 above, 64.3% of the respondents with a count of 45 comprised of the male whereas, the female with a count of 25 accounted for 35.7%. From the results it is clear that the male were more responsive than the female. This indicates that the majority of the respondents who were involved in the study were male. The high composition of male respondents is a justification that the male utilized ATMs compared to their female counterparts. The reason for this is that since the male are more involved in business activities which requires them to constantly bank money or access money quickly, therefore find the use

of ATMs more convenient to use when making transactions. The results are summarized in figure 4.1 below.

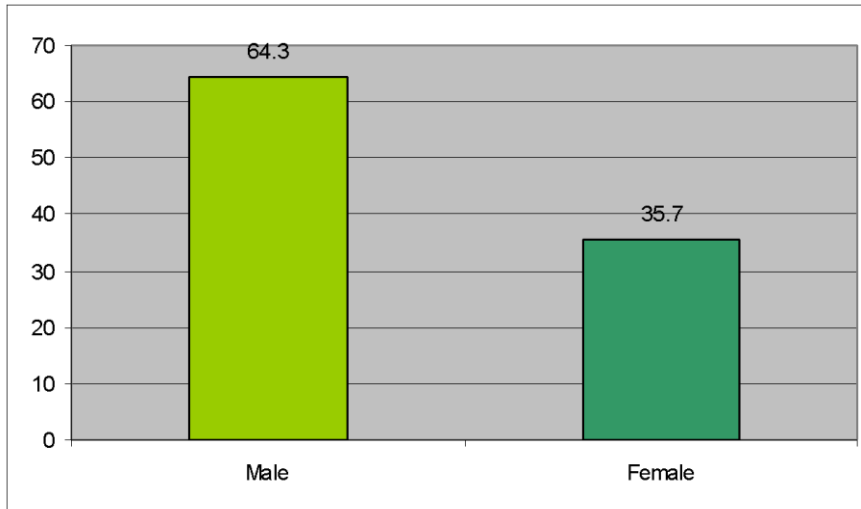


Figure 4.1: Gender Distribution

4.2.2 Age Group Distribution

Frequency tabulation was used by the researcher to present the distribution of the age groups of the respondents. Table 4.2 below presented the results:

Table 4.2: Showing Age Group Distribution

Category	Frequency	Percentage
below 20 yrs	2	2.9
20-29 yrs	39	55.7
30-39 yrs	21	30.0
40-49 yrs	4	5.7
50-59 yrs	4	5.7
Total	70	100.0

Source: Primary data, 2016

According to the results in table 4.2, 55.7% with a count of 39 of the respondents were under the 20-29 years age group, 30% with a count of 21 respondents belonged to the 30-39 years

age group, 5.7% belonged to 40-49 and 50-59 years age groups each whereas, 2.9% of the respondents were under the below 20 years age group. The results implied that the respondents were mature enough and had enough experience about customer satisfaction and could therefore provide the required information on service quality and how it can enhance customer satisfaction at the bank. Likewise, the high provision of responses by the 20-29 years age group is the fact that the majority of the people participating in the banking sector are youth which qualified the findings. The results are summarized in figure 4.2 below.

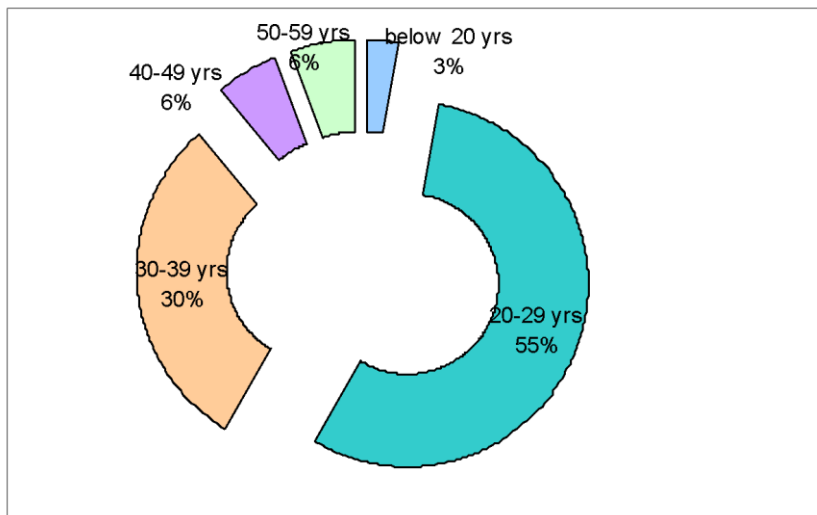


Figure 4.2: Age Group Distribution

4.2.3 Occupation Status Distribution

Frequency tabulation was used by the researcher to present the occupation status of the bank respondent category distribution. Table 4.3 below presented the results:

Table 4.3: Occupation Status Distribution

Category	Frequency	Percentage
Employed	40	58.6
Business/Self employed	22	30.0
Student	08	11.4
Public servant		
Unemployed		
Total	70	100.0

Source: Primary data, 2016

From the results in table 4.3 above, 58.6% of the respondents were employed either in organizations/institutions or other private businesses. 30.0% who were doing business with the bank were in business or self-employed, 11.4% were students. This can be attributed to the salaries that are mostly now being paid through the bank for the employed classes. The businessmen, businesswomen or self-employed use bank accounts to send and receive money as it comes and goes; this shows why their number was fairly high which was confirmation that they possessed the required experience about the services of the bank to be able to provide the required information for the study.

4.3 Item Mean Analysis for ATM Service Dimensions

4.3.1 Item Means for ATM Operations/Usage

In order to assess the level of agreement and disagreement on the different items used to measure ATM operations/usage in the questionnaire, item mean analysis was carried out. The researcher anchored the responses of the respondents on five Likert scale ranging from strongly disagree to strongly agree and the results are presented below.

Table 4.4: Showing Item Means for ATM Operations/Usage

Items	Responses in Percentages (%)					Mean	Stand Dev
	SD %	D %	N %	A %	SA %		
It is easy to conduct a transaction on the ATMs.	1.4	2.9	1.4	32.9	61.4	4.50	.794
ATMs can be used to make cash and cheque deposits.	7.1	4.3	27.1	37.1	24.3	3.67	1.113
ATMs have a user friendly system.	2.9	5.7	4.3	38.6	48.6	4.24	.984
I require nobody to interpret the ATM commands for me.	5.7	1.4	2.9	34.3	55.7	4.33	1.032
Screen language of the ATMs is understandable.	4.3	1.4	1.4	47.1	45.7	4.29	.919
Directions to operate the ATM are clear.	2.9	1.4	2.9	38.6	54.3	4.40	.858
Touch screen of the bank's ATM is working smoothly.	4.3	17.1	11.4	47.1	20.0	3.61	1.120
Global Mean						4.15	

Source: Primary data, 2016

From the table above, to establish the percentage of agreement and disagreement, the percentage of agree and strongly agree were added up and the percentage of disagree and strongly disagree were added up respectively.

From the results, 94.3% agreed that ATMs of the bank were easily found at all useful places like hospitals, malls, stations among others (mean=4.50), 92.9% agreed that directions to operate the ATM were clear (mean=4.40), 90% agreed that they required nobody to interpret the ATM commands for them (mean=4.33), 92.8% concurred that the screen languages of the ATMs were understandable (mean=4.29), 87.2% agreed that ATMs had a user friendly system (mean=4.24), 61.4% were in agreement that ATMs could be used to make cash and cheque deposits (mean=3.67) and 67.1% attested that touch screens of the bank's ATMs were working smoothly (mean=3.61). This was confirmation that customers did not face difficulties when operating the machines. From the results, it is clear that the ATMs of the bank could easily be used by customers to perform their transactions with little or no difficulty. These results are in

line with the assertions of Venkatesh (2000) who stated that with increasing direct experience with the target system, individuals adjust their system-specific ease of use to reflect their interaction with the system. Venkatesh added that in the case of electronic banking, savings of time, money and convenience have been quoted as perceived ease of use. At the same time, perceived ease of use is the extent to which an innovation is easy and communicable to consumers (Snel, 2000).

In agreement with the results, Karjaluoto, Mattila, and Pentto (2002) acknowledged that simplicity or complexity is the extent to which consumers perceive a new innovation as easy or difficult to understand or use. From the results, the standard deviation results of less than 1 provided evidence that the results obtained on ATM usage applied to the bank and therefore could be generalized on other financial institutions. In line with the standard deviation results, global mean results of 4.15 were in support that the respondents agreed that ATM usage/operation was an important factor in determining customer satisfaction on which the bank activities depended.

4.3.2 Item Means for Accessibility of ATMs

In order to assess the level of agreement and disagreement on the different items used to measure accessibility of ATMs in the questionnaire, item mean analysis was carried out. The researcher anchored the responses of the respondents on five Likert scale ranging from strongly disagree to strongly agree and the results are presented below.

Table 4.5: Showing Item Means for Accessibility of ATMs

Item scale	Responses in Percentages (%)						
	SD %	D %	N %	A %	SA %	Mean	SD
It takes a short distance to access the ATM in my location.	12.9	18.6	2.9	42.9	22.9	3.44	1.369
ATM has reduced the frequency of my visits to the banking hall.	2.9	11.4	8.6	32.9	44.3	4.04	1.122
Support multiple languages for transaction.	5.7	7.1	15.7	45.7	25.7	3.79	1.089
ATMs have convenient hours of operation (24/7) without error.	5.7	17.1	18.6	34.3	24.3	3.54	1.200
There is a sufficient number of Stanbic Bank ATM machines.	2.9	12.9	15.7	40.0	28.6	3.79	1.089
The ATMs are always functioning.	1.4	15.7	22.9	45.7	14.3	3.56	.973
ATMs of Stanbic Bank are easily found at all useful places like hospitals, malls, stations etc.	5.7	15.7	27.1	21.4	30.0	3.54	1.236
Global Mean						3.67	

Source: Primary data, 2016

From the table above, to establish the percentage of agreement and disagreement, the percentage of agree and strongly agree were added up and the percentage of disagree and strongly disagree were added up respectively. The results showed that 77.2% of the respondents agreed that ATMs had reduced the frequency of their visits to the banking hall (mean=4.04), 71.4% concurred that ATMs supported multiple languages for transaction (mean=3.79), 68.6% agreed that there was a sufficient number of Stanbic Bank ATM machines (mean=3.79), 60% attested that the ATMs were always functioning (mean=3.56), 58.6% concurred that ATMs had convenient hours of operation (24/7) without error (mean=3.54) and 51.4% agreed that ATMs of Stanbic Bank were easily found at all useful places like hospitals, malls, stations etc (mean=3.54).

From the results, it is clear that the bank's point of sales were evenly distributed which allowed customers easy accessibility seek the required information and in turn take advantage of the services and products offered by the bank. This was confirmation that the bank adhered to delivery of services that met customer needs and wants. Likewise, the standard deviation results provided evidence that the results obtained on accessibility of ATMs could be applied to the bank and therefore could be generalized on other financial institutions. These results are in line with the assertions of Gonzalez, et. al., (2004) who revealed that customers want to maintain good relations with organizations that keep their promises, particularly promises about the service outcomes and core service attributes. The qualitative results were also in support of the above results when the residents revealed that having the assurance that the staff of the bank would meet their expectations was a major factor that influenced their perceptions on how effective the bank delivered services to customers.

4.3.3 Item Means for Reliability of ATMs

In order to assess the level of agreement and disagreement on the different items used to measure reliability of ATMs in the questionnaire, item mean analysis was carried out. The researcher anchored the responses of the respondents on five Likert scale ranging from strongly disagree to strongly agree and the results are presented below.

Table 4.6: Showing Item Means for Reliability of ATMs

Item scale	Responses in Percentages (%)						
	SD %	D %	N %	A %	SA %	Mean	SD
The ATM can be used to check and print account mini statements.	2.9	4.3	8.6	30.0	54.3	4.29	.995
I find enough money during transactions.	2.9	7.1	8.6	52.9	28.6	3.97	.963
Processing of transactions is very fast.		7.1	8.6	48.6	35.7	4.13	.850
I am happy with the denomination of currencies provided by the ATM.	2.9	14.3	15.7	50.0	17.1	3.64	1.022
The ATM provides a range of services.	2.9	8.6	30.0	37.1	21.4	3.66	1.006
I prefer ATM to Branch banking.	8.6	15.7	11.4	28.6	35.7	3.67	1.338
Human Tellers are still very important.	1.4			24.3	74.3	4.70	.622
Global Mean						4.01	

Source: Primary data, 2016

From the table above, to establish the percentage of agreement and disagreement, the percentage of agree and strongly agree were added up and the percentage of disagree and strongly disagree were added up respectively.

According to the results in table 4.7 on ATM reliability, 98.6% of the respondents agreed that human tellers were still very important (mean=4.70), 84.3% agreed that processing of transactions was very fast (mean=4.13), 84.3% attested that the ATMs could be used to check and print account mini statements (mean=4.29), 81.5% agreed that they found enough money during transactions (mean=3.97), 67.1% agreed that they were happy with the denomination of currencies provided by the ATMs (mean=3.64), 64.3% were in agreement that they preferred ATMs to branch banking (mean=3.67) and 58.5% agreed that the ATM provided a range of services (mean=3.66). This position was supported by Berry et al. (1990) who emphasized that service reliability meant consistently performing the service dependably and accurately. Hossain and Leo (2009) point out that service reliability is the service core to most customers

and managers should use every opportunity to build a do-it-right-first attitude. This was a revelation that timeliness during service delivery was paramount satisfying customer needs and wants.

Al- Fawzan (2005) asserts that portraying the reliability and consistency with which the service is delivered involves emphasizing dependability of the process by which the service is produced. Therefore, attention should be drawn to offering dependable services to customers.

This is why Wang and Hing-Po (2002) stated that reliability is the strongest predictor of consumer satisfaction because it embeds the dynamic capability to perform the promised service dependably and accurately. The study established that ATM reliability in Stanbic bank has a positive influence on customer satisfaction. The more customers perceive the services to be reliable, the more they were satisfied with the bank services.

4.3.4 Item Means for ATM Service Security

In order to assess the level of agreement and disagreement on the different items used to measure ATM service security in the questionnaire, item mean analysis was carried out. The researcher anchored the responses of the respondents on five Likert scale ranging from strongly disagree to strongly agree and the results are presented below.

Table 4.7: Showing Item Means for ATM Service Security

Item scale	Responses in Percentages (%)						
	SD %	D %	N %	A %	SA %	Mean	SD
There are always enough security guards to monitor the customers at ATM points.	2.9	2.9	14.3	40.0	40.0	4.11	.956
I am comfortable when withdrawing cash from ATM.	4.3	5.7	7.1	45.7	37.1	4.06	1.034
My ATM cash deposits are secure.		8.6	18.6	54.3	18.6	3.83	.834
I feel safe & secure when I enter my PIN/Password to the ATM.		2.9	14.3	64.3	18.6	3.99	.670
I always find few people at the ATM points.	5.7	20.0	8.6	47.1	18.6	3.53	1.176
Bank constantly sends me alerts on ATM frauds.	8.6	17.1	22.9	28.6	22.9	3.40	1.256
Global mean						3.82	

Source: Primary data, 2016

From the table above, to establish the percentage of agreement and disagreement, the percentage of agree and strongly agree were added up and the percentage of disagree and strongly disagree were added up respectively.

From the results, 82.9% of the respondents agreed that they felt safe and secure when they entered their PINs/Passwords to the ATM (mean=3.99), 82.8% agreed that they were comfortable when withdrawing cash from ATMs (mean=4.06), 80% agreed that there were always enough security guards to monitor the customers at ATM points (mean=4.11), 72.9% agreed that their ATM cash deposits were secure (mean=3.83) and 65.7% were of the view that they always found few people at the ATM points (mean=3.53). Customers who feel very comfortable and protected using ATM services tend to use more of ATM than their counterparts who perceive otherwise. Considering the scale of 1-5, a mean of 3 and above indicates that there is security at the ATMs of the bank.

Table 4.8: Showing Item Means for Customer Satisfaction

Item scale	Responses in Percentages (%)						
	SD %	D %	N %	A %	SA %	Mean	SD
I am happy with the ATM service that is provided by the bank.	1.4	4.3	4.3	45.7	44.3	4.27	.850
I am willing to try out new bank products and services offered.	1.4	5.7	15.7	55.7	21.4	3.90	.854
Intelligent ATMs have eased my ATM cash deposit transactions.	2.9	10.0	30.0	34.3	22.9	3.64	1.036
I will strongly continue to use the Bank's ATM services.	1.4	5.7	5.7	45.7	41.4	4.20	.894
I am satisfied with your personnel at the bank.	1.4	5.7	2.9	40.0	50.0	4.31	.894
I will recommend Stanbic Bank to my family and friends.	1.4	5.7	1.4	45.7	45.7	4.29	.870
I will always use this Bank in every my bank activities/transactions	1.4	2.9	8.6	54.3	32.9	4.14	.804

Source: Primary data, 2016

In order to assess the level of agreement and disagreement on the different items used to measure customer satisfaction in the questionnaire, item mean analysis was carried out. The researcher anchored the responses of the respondents on five Likert scale ranging from strongly disagree to strongly agree and the results are presented below.

From the table above, to establish the percentage of agreement and disagreement, the percentage of agree and strongly agree were added up and the percentage of disagree and strongly disagree were added up respectively. According to the results in table 4.10 on customer satisfaction, 90% of the respondents agreed that they were happy with the ATM service that was provided by the bank (mean=4.27), 90% agreed that they were satisfied with the personnel at the bank (mean=4.31), 91.4% agreed that they would recommend Stanbic Bank to their family and friends (mean=4.29), 87.2% attested that they would always use this Bank for their bank activities/transactions (mean=4.14), 87.1% agreed that they would strongly

continue to use the Bank's ATM services (mean=4.20), 77.1% agreed that they were willing to try out new bank products and services offered (mean=3.90) and 57.2% were of the view that intelligent ATMs had eased their ATM cash deposit transactions (mean=3.64). In line with the findings, it has been confirmed by Gonzalez, et. al., (2004) who suggested possible dimensions that one can use in measuring customer satisfaction such as quality of service, speed of service, pricing, complaints or problems, trust in employees, the closeness of the relationship with contacts in firm, other types of services needed and your positioning in clients' minds.

In support, Kotler and Keller (2009) affirmed that when a consumer claims to be satisfied with the product or service, it means that the customer likes the way it has performed in use. In agreement, Kotler and Keller (2009) posits that as a matter of fact, satisfaction is the pleasure derived by someone from the consumption of goods or services offered by another person or group of people; or it can be the state of being happy with a situation. Client happiness, which is a sign of customer satisfaction, is and has always been the most essential thing for any organization (Bennett and Barkensio, 2005).

4.4 The Relationships between the Study Variables

In this section, the results that address the research objectives are presented and Pearson's Correlation Test was used to answer the research questions of the study. To investigate the relationship among the constructs a Zero-order correlation table was generated. The Pearson correlation coefficient (r) was employed to establish the relationship between ATM operation, ATM accessibility, ATM reliability, ATM service security and customer satisfaction.

4.4.1 ATM Operation and Customer Satisfaction

To investigate the relationship between ATM operation and customer satisfaction, a Zero-order correlation table was generated. To study the relationship between ATM operation and customer satisfaction, Pearson’s correlation test was used and the results are presented in table 4.9 below.

Table 4.9: ATM Operation and Customer Satisfaction

Variables		ATM Operation	Customer Satisfaction
ATM Operation	Pearson Correlation	1	.362**
	Sig. (2-tailed)		.000
Customer Satisfaction	Pearson Correlation	.362**	1
	Sig. (2-tailed)	.000	

***. Correlation is significant at the 0.01 level (2-tailed).*

Source: Primary data, 2016

Correlation results indicated a positive relationship between ATM operation and customer satisfaction ($r = 0.362^{**}$, $p < .01$). The results in the above table indicate that there is a statistically significant positive correlation between ATM operation and customer satisfaction at 0.362^{**} with a significance of 0.000 at the level of 0.01. The results are in disagreement with hypothesis one which showed that ATM services operations did not influence customer satisfaction well as the results posit that the reverse is true. The correlation results between ATM operation and customer satisfaction provide evidence that ATM operation related to customer satisfaction in regard to loyalty, repeat purchases and word of mouth; by 36.2% significance. In support of the findings, the banks’ ATM operation makes it dependable and in turn causes customer satisfaction. Ease of use refers to their perceptions regarding the process leading to the final electronic banking outcome. Liang and Zhang (2009) asserted that in the case of electronic banking, savings of time, money, and convenience have been quoted as

perceived ease of use. At the same time, perceived ease of use is the extent to which an innovation is ease and communicable to consumers (Snel, 2000).

4.4.2 ATM Accessibility and Customer Satisfaction

To investigate the relationship between ATM accessibility and customer satisfaction, a Zero-order correlation table was generated. To study the relationship between ATM accessibility and customer satisfaction, Pearson’s correlation test was used and the results are presented in table 4.10 below.

Table 4.10: ATM Accessibility and Customer Satisfaction

Variables		ATM Accessibility	Customer Satisfaction
ATM Accessibility	Pearson Correlation	1	.224**
	Sig. (2-tailed)		.000
Customer Satisfaction	Pearson Correlation	.224**	1
	Sig. (2-tailed)	.000	

***.* Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data, 2016

Correlation results indicated a low significant and positive relationship between ATM accessibility and customer satisfaction ($r = 0.224^{**}$, $p < .01$). The results in the above table indicate that there is a moderately low and statistically significant positive correlation between ATM accessibility and customer satisfaction at 0.224^{**} with a significance of 0.000 at the level of 0.01. The results were not in line with hypothesis two which stated that ATM accessibility did not affect customer satisfaction. This contrary to the results of the study which showed that ATM accessibility affected customer satisfaction in commercial banks. The results show that a unit change in ATM accessibility would cause a corresponding improvement in customer satisfaction of 22.4%. The correlation results between ATM accessibility and customer satisfaction provide evidence that ATM accessibility related to customer satisfaction

in regard to loyalty, repeat purchases and word of mouth; by 22.4% significance. The importance of accessibility has been widely recognized in the field of electronic banking (Guriting and Ndubisi, 2006). Accessibility as adapted from the work of Zeithaml (2002) as approachability and ease of contact to services. In support of customers, Zeithaml (2002) said that to provide ease of access to ATMs, it should be made available at public places such as airport, shopping centers, Petrol/Gas stations etc. making the ATMs available at both on-banks and off-banks premises is expected to reduced congestion at ATM centers, which mostly lead to security problems. ATMs are of great help to many customers because they do not have to carry large amount of cash with them. Griliches (1994) points out that, improved access generates unmeasured but presumably not unvalued time savings for the users.

Table 4.11: ATM Reliability and Customer Satisfaction

Variables		ATM Reliability	Customer Satisfaction
ATM Reliability	Pearson Correlation	1	.402**
	Sig. (2-tailed)		.000
Customer Satisfaction	Pearson Correlation	.402**	1
	Sig. (2-tailed)	.000	
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Primary data, 2016

In order to understudy the relationship between ATM reliability and customer satisfaction, the Pearson’s correlation test was used. The Pearson correlation coefficient was used because it presents data in a numerical way to quantify the relationship between two variables where the correlation coefficient is determined. Where if the correlation coefficient, is positive, then an increase in the independent variable would result in an increase in dependent variable, however if it was negative, an increase in independent variable would result in a decrease in the

dependent variable. Larger correlation coefficients would suggest a stronger relationship between the variables and vice versa.

The correlation results in table 4.11 above indicated a moderate significant and positive relationship between ATM reliability and customer satisfaction ($r = 0.402^{**}$, $p < .01$). The study revealed that there is a strong and statistically significant positive correlation between ATM reliability and customer satisfaction at 0.402^{**} with a significance of 0.000 at the level of 0.01. The results show that a unit change in ATM reliability would cause a corresponding improvement in customer satisfaction of 40.2%. The results are in disagreement with hypothesis three which stated that reliability of ATMs did not influence customer satisfaction. This is contrary to the results which revealed that reliability of ATMs influenced customer satisfaction. The implication of this is that ATM service reliability determined a greater influence on customer satisfaction. Thus, when the level of service reliability is high, this would have a positive effect on customer satisfaction. According to Al-Fawzan (2005), reliability is one of the most important dimensions of ATM service because it is vital to make customers to trust that the organization is going to perform what it promises to do.

Berry et al. (1990) averred that reliability is the service core to most customers and managers should use every opportunity to build a do-it-right-first attitude. Portraying the reliability and consistency with which the service is delivered consists of emphasis on technological superiority and dependability of the process by which the service is produced and being consistent and dependable in the performance of the service.

4.4.4 ATM Service Security and Customer Satisfaction

Correlation analysis was done where by all responses for each variable; ATM service security and customer satisfaction were aggregated into a single index and respectively and then Pearson’s correlation Co-efficient (r) technique was used to assess the nature and magnitude of the relationship. Table 4.12 gives Pearson’s correlation Coefficient for the two variables which include; ATM service security and customer satisfaction.

Table 4.12: ATM Service Security and Customer Satisfaction

		ATM Service Security	Customer Satisfaction
ATM Service Security	Pearson Correlation	1	.219**
	Sig. (2-tailed)		.000
Customer Satisfaction	Pearson Correlation	.219**	1
	Sig. (2-tailed)	.000	
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Primary data, 2016

Correlation results indicated a low significant and positive relationship between ATM service security and customer satisfaction ($r = 0.219^{**}$, $p < .01$). The results indicate that there is a moderately low and significant positive correlation ATM service security and customer satisfaction at 0.219^{**} with a significance of 0.000 at the level of 0.01. The results provide justification that when the bank draws a lot of attention to ATM service security, this would enhance customer satisfaction; however service security had a 21.9% influence on customer satisfaction. To be more precise, lack of security were found to be significant obstacles to customer satisfaction. Roboff and Charles (1998) found that people have a weak understanding of online banking security risks although they are aware of the risks. Furthermore they noted that although consumers’ confidence in their bank was strong, their confidence in technology was weak (Howcroft, et al., 2002). As the amount of products and services offered via the

internet grows rapidly, consumers are more and more concerned about security and privacy issues.

4.5 Multiple Regression Model

Regression analysis includes any techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables. More specifically, regression analysis helps understand how the typical value of the dependent variable changes when any one of the independent variables is varied, while the other independent variables are held fixed. Most commonly, regression analysis estimates the conditional expectation of the dependent variable given the independent variables. Regression analysis is widely used for prediction and forecasting, where its use has substantial overlap with the field of machine learning. Regression analysis is also used to understand which among the independent variables are related to the dependent variable and to explore the forms of these relationships. In restricted circumstances, regression analysis can be used to infer causal relationships between the independent and dependent variables. A regression analysis was carried out to examine the extent to which study variables ATM operation, ATM accessibility, ATM reliability, ATM service security predict customer satisfaction in Stanbic bank. The results are presented in table 4.13 below:

Table 4.13: Showing the Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.786	.408		4.373	.000
ATM operation/usage	.126	.053	.172	2.350	.010
ATM accessibility	.133	.062	.144	2.161	.002
ATM reliability	.311	.072	.315	4.297	.000
ATM security	.010	.070	.010	0.148	.013
Dependent variable: Customer satisfaction					
R ² =.416		Adj R ² =.391		F=12.216, Sig= 0.000	

Source: Primary data, 2016

According to table 4.13, ATM operation, ATM accessibility, ATM reliability and ATM service security predict 39.1% of customer satisfaction (Adjusted R Square = .391). The regression model was significant and thus reliable for making conclusions and recommendations. The most significant predictor of customer satisfaction was ATM reliability (Beta= 0.315), followed by ATM operations (Beta= 0.172) and then followed by ATM accessibility (Beta= 0.144) and lastly ATM security (Beta=0.010). ATM reliability led to a 0.315 increase in the customer satisfaction, a change in ATM operations led to a 0.172 increase in the customer satisfaction, ATM accessibility resulted into a 0.144 change in customer satisfaction and ATM security would cause a 0.010 change in customer satisfaction. The findings revealed that ATM reliability and ATM operations were strong predictors of customer satisfaction whereas ATM accessibility and security was a weak predictor of customer satisfaction. This means that when banks put a lot of emphasis on improving ATM service in regard to making their services reliable, ensure high responsiveness during service delivery and service tangibility, this would

cause the much needed customer satisfaction which would in turn result into bank effectiveness and efficiency.

The results on the regression analysis are in support of the theories selected for the study. For this reason, consumers can also reduce the tension resulting from a discrepancy between expectations and product performance either by distorting expectations so that they coincide with perceived product performance or by raising the level of satisfaction by minimizing the relative importance of the disconfirmation experienced. A customer is either satisfied or dissatisfied as a result of positive or negative difference between expectations and perceptions. Rogers (1983) asserts that the services offered by the bank should be able to help the customer assess the relative advantage, complexity, compatibility, trialability, and observability. Therefore, it can be deduced that ATM service was important in predicting customer satisfaction in commercial banks and by so doing had a positive influence on the bank's customer loyalty, increase in customer repeat purchases and positive word of mouth about the bank.

4.6 Conclusion

This chapter dealt with the presentation and interpretation of the results of the sample characteristics and the study objectives employing frequency tabulations, item mean analysis, correlations and regression analysis when studying the effect of ATM service on customer satisfaction at Stanbic Bank. The results showed that ATM operation, ATM accessibility, ATM reliability and ATM service security were determinants of customer satisfaction at the bank. the results showed that a change in ATM operation resulted in a 36.2% in customer satisfaction, a change in ATM accessibility caused a 22.4% change in customer satisfaction, a

change in ATM reliability resulted into a 40.2% change in customer satisfaction whereas, a change in ATM security caused a 21.9% change in customer satisfaction. This chapter therefore, led to chapter five which dealt with the discussion, conclusion and recommendations.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions, and recommendations arising out of the research findings in chapter four and suggests areas for further study.

5.2 Summary

5.2.1 Sample Characteristics

From the findings on the demographic characteristics, the majority of the respondents were male, with the results showing that the majority of the respondents were under the age of 20-29 years. A large percentage of the respondents were employed and business class/self-employed.

5.2.2 ATM Operation and Customer Satisfaction

According to the correlational findings on the effect of ATM operation on customer satisfaction, a significant relationship was observed. This is confirmation that through ATM use during service delivery by the customers, this had a positive effect on customer satisfaction. The correlational results are in line with the regression analysis which revealed that ATM operation predicted customer satisfaction.

5.2.3 ATM Accessibility and Customer Satisfaction

Similarly, the association between ATM accessibility on customer satisfaction revealed a significant relationship between the study variables. The findings suggest that ATM accessibility was paramount in promoting customer satisfaction. The correlational results are in

agreement with the regression analysis findings which revealed that ATM accessibility predicted customer satisfaction.

5.2.4 ATM Service Reliability and Customer Satisfaction

The findings on the effect of ATM reliability and customer satisfaction revealed a significant relationship. This is confirmation that when bank services were reliable, this would enhance customer satisfaction. The correlation findings were also supported by regression analysis results which showed that ATM reliability was a significant predictor of customer satisfaction.

5.2.5 ATM Service Security and Customer Satisfaction

Similarly, the association between ATM service security on customer satisfaction revealed a significant relationship between the study variables. The findings suggest that ATM service security was paramount in promoting customer satisfaction. The correlational results are in agreement with the regression analysis findings which revealed that ATM service security predicted customer satisfaction.

5.3 Conclusions

5.3.1 ATM Operation and Customer Satisfaction

The findings established that ATM operation influenced customer satisfaction in Stanbic bank which was an implication that ease of use of ATM services impacted on customer satisfaction in Stanbic bank. The positive significant relationship between ATM operation and customer satisfaction is justification that to attain desirable customer satisfaction, there was need to make the services delivered by ATMs easy to operate as this would promote customer satisfaction.

5.3.2 ATM Service Reliability and Customer Satisfaction

The findings on the effect of ATM reliability on customer satisfaction revealed that the bank delivered reliable financial services much as there was need for more improvement to be made so as to enhance customer satisfaction. The positive significant relationship between ATM reliability and customer satisfaction was confirmation that for the customers to be satisfied with the current service delivery of the bank there was a need to make their financial services more reliable. This is justification that reliability was paramount in improving customer satisfaction.

5.3.3 ATM Accessibility and Customer Satisfaction

The findings established that ATM accessibility influenced customer satisfaction in Stanbic bank which was an implication that ease of accessibility of ATM services impacted on customer satisfaction in Stanbic bank. The positive significant relationship between ATM accessibility and customer satisfaction is justification that to attain desirable customer satisfaction, there was need to make the ATMs of the bank more accessible by locating them evenly across the country as this would promote customer satisfaction.

5.3.4 ATM Service Security and Customer Satisfaction

The findings validate that ATM service security which is a component of ATM service was essential for customer satisfaction. Effecting ATM service security by management would promote customer loyalty, repeat purchase and word of mouth. This was confirmation that ATM service security was major in enhancing customer satisfaction in Stanbic bank.

5.4 Recommendations

In light of the research findings, the following recommendations are made:

a) ATM Operation and Customer Satisfaction

The findings revealed that ATM operation/usage as a dimension of ATM service was statistically significant to overall customer satisfaction as the bank's level of ATM usage was found to be a strong predictor of customer satisfaction. The management of the Stanbic bank should appreciate the fact that when responding to customer needs and wants through ATM services was paramount and should be implemented in a way resulting not only in better service delivery but also in general understanding and satisfaction of all. Therefore, it is important to understand the expectations of customers regarding ATM usage so as to deliver financial services in a responsive manner as this would enhance customer satisfaction. Likewise, they should ensure that there is customer service acceptance, understandability of the offered services and convenience of the respective bank end users.

b) ATM Accessibility and Customer Satisfaction

The findings revealed that ATM accessibility as a component of service quality had a significant effect on customer satisfaction. Therefore, the management of Stanbic bank should commit to making financial services more accessible through ATM through even distribution of ATMs at all public places and also making sure that the machines are always up and running, are loaded with sufficient funds and are secure for customers to use as this would increase customer satisfaction.

c) ATM Reliability and Customer Satisfaction

The findings revealed that ATM reliability as a component of ATM service greatly contributed to customer satisfaction in Stanbic bank. Therefore, management of Stanbic bank should be committed to the provision of reliable financial services such as delivery of services on time, as promised by the bank, with a personal touch from the staff of the bank and ensure that the delivery process is adhered to and fully implemented according to the satisfaction of the customers. This calls for top management support and employee commitment as this would promote employee job satisfaction and cause the much needed customer satisfaction which would in turn result into bank effectiveness and efficiency.

d) ATM Service Security and Customer Satisfaction

The findings revealed that ATM service security as a component of ATM service had a significant effect on customer satisfaction. Therefore, the management of Stanbic bank should commit to making financial services delivered through ATMs more secure for the customers by guarding the premises, providing comfort when drawing cash or depositing cash, provide privacy when entering PINs/passwords and not having long lines as this would enhance customer satisfaction. This could be achieved through putting in place secure, attractive, well lit and positioned ATMs that promote customer satisfaction.

5.5 Areas for Further Research

- i) This study concentrated on ATM operation, ATM accessibility, ATM reliability, ATM service security and customer satisfaction in Stanbic Bank. Future research should

attempt to widen the scope of the study to cover other financial institutions which operate ATMs to ascertain the findings.

- ii) The study adopted a case study type of research design which focused on Stanbic Bank only at a point in time. To study the variables in a more detailed way, a longitudinal study is more appropriate.
- iii) From the findings, the regression analysis revealed that the model could only explain 39.1% in variance of customer satisfaction; a study should be carried out comprising of other factors which were not part of the model. These include; loyalty, service delivery, perceived usefulness, perceived ease of use among others.
- iv) Further studies should be undertaken on the organizational practices meant to enhance ATM service in banks so as to generate information that can be helpful in the banking sector.

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APPENDIX I

RESEARCH QUESTIONNAIRE

This questionnaire is designed mainly for the purpose of academic exercise. As a result, every information provided will be treated with the confidentiality it deserves as much as possible and also identity of all respondents would be highly protected.

SECTION A: BIO DATA

Please tick where applicable to you.

1. What is your sex?

Male.....

Female.....

2. What age group do you belong? Age group (years) Please **tick** against your age group

Below 20

40-49

20-29

50-59

30-39

Above 60

3. What is your occupation status? Please **tick** on your option.

Employed

Business/Self employed

Student

Public servant

Unemployed

Section B: ATM Operations

Please **tick** according to the level you agree or disagree with the statements below. (5 – Strongly Agree (SA), 4 – Agree (A), 3 – Not Sure (NS), 2 – Disagree (D) and 1 – Strongly Disagree (SD))

	SD	D	N	A	SA
It is easy to conduct a transaction on the ATMs.					
ATMs can be used to make cash and cheque deposits.					
ATMs have a user friendly system.					
I require nobody to interpret the ATM commands for me.					
Screen language of the ATMs is understandable.					
Directions to operate the ATM are clear.					
Touch screen of the bank's ATM is working smoothly.					

Section C: ATM Accessibility

Please **tick** according to the level you agree or disagree with the statements below. (5 – Strongly Agree (SA), 4 – Agree (A), 3 – Not Sure (NS), 2 – Disagree (D) and 1 – Strongly Disagree (SD))

	SD	D	N	A	SA
It takes a short distance to access the ATM in my location.					
ATM has reduced the frequency of my visits to the banking hall.					
Support multiple languages for transaction.					
ATMs have convenient hours of operation (24/7) without error.					
There is a sufficient number of Stanbic Bank ATM machines.					
The ATMs are always functioning.					
ATMs of Stanbic Bank are easily found at all useful places like hospitals, malls, stations etc.					

Section D: ATM Reliability

Please **tick** according to the level you agree or disagree with the statements below. (5 – Strongly Agree (SA), 4 – Agree (A), 3 – Not Sure (NS), 2 – Disagree (D) and 1 – Strongly Disagree (SD))

	SD	D	N	A	SA
The ATM can be used to check and print account mini statements.					
I find enough money during transactions.					
Processing of transactions is very fast.					
I am happy with the denomination of currencies provided by the ATM.					
The ATM provides a range of services.					
I prefer ATM to Branch banking.					

Human Tellers are still very important.					
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Section D: ATM Service Security

Please **tick** ✓ according to the level you agree or disagree with the statements below. (5 – Strongly Agree (SA), 4 – Agree (A), 3 – Not Sure (NS), 2 – Disagree (D) and 1 – Strongly Disagree (SD))

	SD	D	N	A	SA
There are always enough security guards to monitor the customers at ATM points.					
I am comfortable when withdrawing cash from ATM.					
My ATM cash deposits are secure.					
I feel safe & secure when I enter my PIN/Password to the ATM.					
I always find few people at the ATM points.					
In case of two ATMs in same premises, there is a partition between them to maintain privacy.					
Bank constantly sends me alerts on ATM frauds.					

Section E: Customer Satisfaction

Please **tick** ✓ according to the level you agree or disagree with the statements below. (5 – Strongly Agree (SA), 4 – Agree (A), 3 – Not Sure (NS), 2 – Disagree (D) and 1 – Strongly Disagree (SD))

	SD	D	N	A	SA
I am happy with the ATM service that is provided by the bank.					
I am willing to try out new bank products and services offered.					
Intelligent ATMs have eased my ATM cash deposit transactions.					
I will strongly continue to use the Bank’s ATM services.					
I am satisfied with your personnel at the bank.					
I will recommend Stanbic Bank to my family and friends.					
I will always use this Bank in every my bank activities/transactions					

With a scale of **1 – 10**, I would rate the bank’s ATM services with? (**10 being the highest rating**)

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Reasons why?

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Thank you for taking a moment to respond to this questionnaire